CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

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Weekly Bulletin

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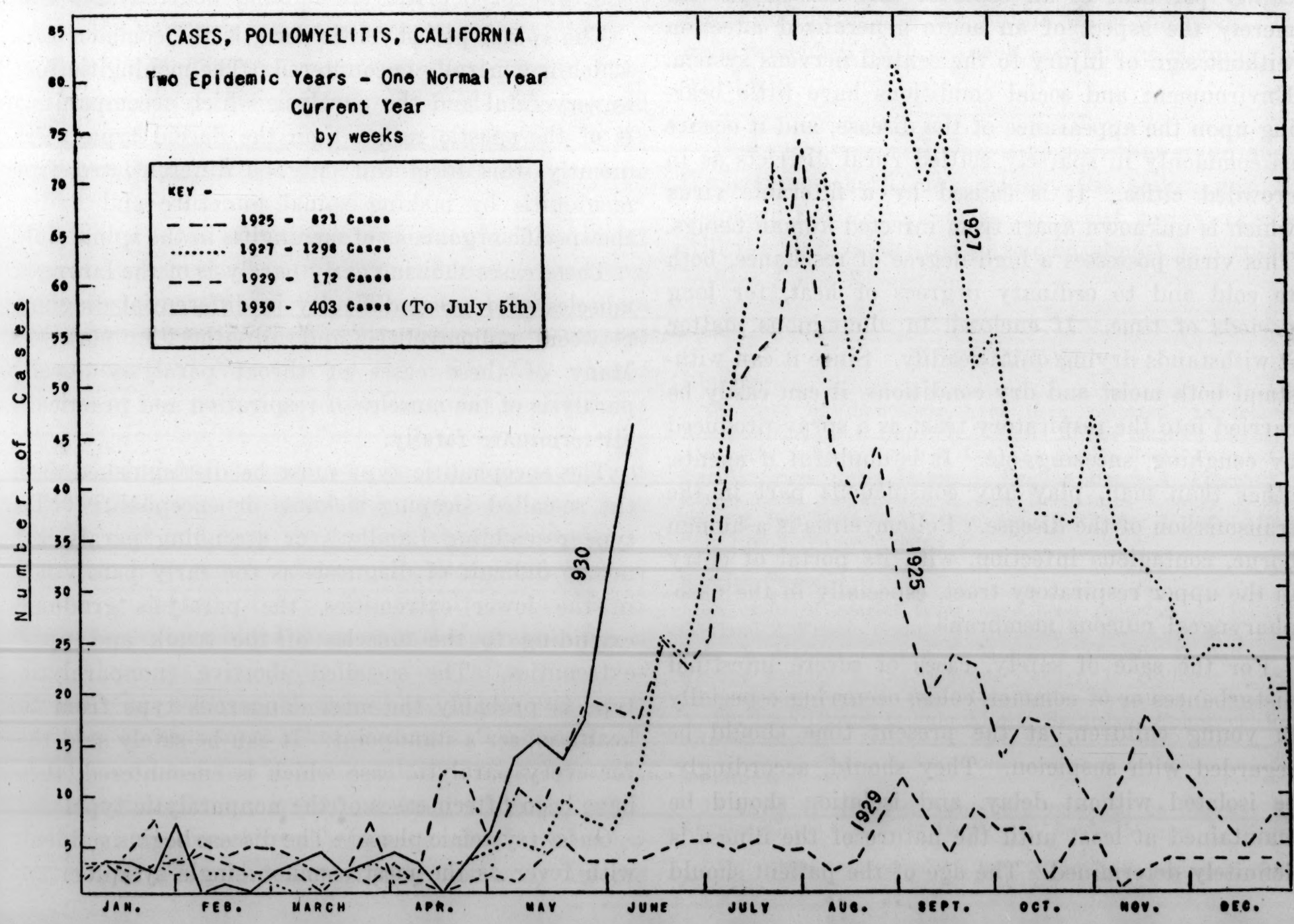
To All Health Officers

Acute anterior poliomyelitis, commonly known as infantile paralysis, is epidemic in California at the present time. The situation is worthy of serious consideration. To date this year, 238 cases have been reported:

January, 17; February, 3; March, 12; April, 16; May, 59; June, 131 (first three weeks).

Many cases are not recognized as acute anterior poliomyelitis since diagnosis in the systemic stage can seldom be made except in the presence of an



epidemic. This circular letter is being sent so as to urge the health officers to seek the cooperation of the physicians and place under control all suspicious cases with the least possible delay.

It has been observed that in those years when poliomyelitis becomes unusually prevalent in the late spring and early summer, there is nearly always an extensive outbreak of the disease in the late summer and early fall, when, under normal conditions, the disease is seasonally more prevalent. The prompt institution of control measures at the present time, therefore, is of the utmost importance in order that the chances for a widespread epidemic during the coming fall may be minimized.

Poliomyelitis, perhaps, is one of the most common of the communicable diseases. Since paralysis occurs in but a small percentage of cases, proper diagnosis is very often not made. Whenever the disease becomes epidemic, all cases of sudden, acute illness in children must be regarded with suspicion. It should be remembered that poliomyelitis is not essentially a disease of the central nervous system. It is only in a relatively small number of cases that there is any invasion of the central nervous system. Paralysis is purely an accidental and incidental occurrence, and in reality it occurs rarely. Seventy or eighty per cent of all cases of this disease present merely the aspect of an acute generalized affection without sign of injury to the central nervous system. Environment and social conditions have little bearing upon the appearance of the disease, and it occure as commonly in sparsely settled rural districts as in crowded cities. It is caused by a filterable virus which is unknown apart from infected human beings. This virus possesses a high degree of resistance, both to cold and to ordinary degrees of heat, for long periods of time. If enclosed in albuminous matter it withstands drying quite readily. Since it can withstand both moist and dry conditions, it can easily be carried into the respiratory tract as a spray produced by coughing, sneezing, etc. It is doubtful if agents, other than man, play any conspicuous part in the transmission of the disease. Poliomyelitis is a human borne, contagious infection, with its portal of entry in the upper respiratory tract, especially in the nasopharyngeal mucous membrane.

For the sake of safety, cases of severe intestinal disturbances or of common colds, occurring especially in young children, at the present time should be regarded with suspicion. They should, accordingly, be isolated without delay, and isolation should be maintained at least until the nature of the illness is definitely determined. The age of the patient should not be considered in making diagnosis. While most cases occur in young children, many adolescents and young adults are attacked. The younger children seem to weather the acute stages better than adolescents and young adults, among whom the death rate is especially high. Since the adult carrier is known to play an important part in the transmission of the disease, it is important that whenever a case of poliomeylitis occurs in a family, all members, as well as other contacts, be isolated for two weeks, as required under the regulations of the California Department of Public Health. Cases of poliomyelitis must be quarantined for a period of three weeks.

For your information, a brief outline of the disease is appended:

The classification of poliomyelitis, which is most useful from a clinical standpoint, in that it gives the different forms as they are met with in practice, is as follows:

1. The spinal poliomyelitic form.
2. The meningitic.
3. The encephalitic.
4. The form resembling Landry's paralysis.
5. The abortive.
6. The bulbar or pontine form.
7. The ataxic.
8. The plyneuritic (resembling neuritis).

The spinal poliomyelitic form is the common form which is generally encountered. The meningitic form is very fatal and the paralysis which accompanies it is of the spastic rather than the flaccid type. Frequently, this form can only be differentiated from meningitis by making spinal puncture and finding the specific organisms of meningitis in the spinal fluid.

Those cases showing early paralysis of the laryngeal muscles offer great difficulty in differential diagnosis between poliomyelitis and diphtheritic paralysis. Many of these cases of throat paralysis develop paralysis of the muscles of respiration and practically all terminate fatally.

The encephalitic type must be distinguished from the so-called sleeping sickness or encephalitis. The type resembling Landry's or ascending paralysis is not so difficult of diagnosis as the early paralysis is in the lower extremities, the paralysis gradually extending to the muscles of the trunk and upper extremities. The so-called abortive (nonparalytic) type is probably the most dangerous type from the health officer's standpoint. It can be safely said that for every paralytic case which is encountered, there have been fifteen cases of the nonparalytic type.

Onset (systemic phase): The disease begins suddenly with fever as the most common single symptom and

the fever may be any grade. There is generally pain or tenderness in the back of the neck, back, arms and legs. In young children, vomiting and diarrhea may usher in the attack, although constipation is more often present. In older children, headache and muscle pains are generally found. Sometimes the first symptom is that of lassitude or drowsiness; sometimes interrupted by periods of great restlessness or even convulsions. Sore throat is not uncommon.

While the systemic symptoms are merely those which may occur in any sick child and may pass off without a definite diagnosis being made, the combination of fever, vomiting, constipation, drowsiness, and irritability, especially when combined with headache, a transient flushing of the face, abnormal sweating, or retention of urine, justifies the tentative diagnosis of poliomyelitis if frank cases are occurring in the vicinity.

The paralytic stage: After the systemic phase, lasting a few days at the most, there may be a period of improvement, or the disease may go directly into the paralytic stage. In about 75 per cent of the cases in which paralysis appears, it comes on or before the fourth day of illness. Sometimes the paralysis can be discovered only by careful searching. It may be limited to a single muscle or a part of a single muscle, a group of muscles, or it may be general. In most cases, the paralysis is partial rather than complete.

Treatment: The treatment in the early stage of the disease, that is, when the temperature is elevated and the patient suffering from pain and tenderness in the paralyzed part, *should be absolute rest only, and no active physical or mechanical interference whatsoever.* The many forms of massage and electrical treatment should be postponed until all constitutional symptoms have disappeared and the patient no longer suffers from pain or tenderness. *The only active treatment of a paralyzed limb during the acute stage should be rest of the part in such position that contractures can not develop, in an effort to keep the limb in as normal condition as possible.* In hospital practice it is now the custom to place the paralyzed limbs in a plaster cast and keep the patient absolutely quiet.

Serum from recovered cases of poliomyelitis is used in the treatment of this disease. It is considered advisable to take blood from only the paralytic cases. This blood may be taken any time after the temperature has returned to normal and it has been taken as long as ten years after recovery. While whole blood may be given intramuscularly in emergencies, the recommendation is that at least 50 cubic centimeters of the convalescent serum (preferably a pooled serum) be given intramuscularly, as early in the course of the disease as possible. Health officers are urged to prepare a list of donors from the known paralytic cases in their territory and have the list available for those physicians requesting convalescent serum. When feasible, it is recommended that collecting stations be established.

Very truly yours,

WALTER M. DICKIE, M. D.,
Director of Public Health.

SAFEGUARDING OF MOUNTAIN STREAMS

The Bureau of Sanitary Engineering is making an investigation of mountain streams which flow through densely occupied recreational territory. This investigation has covered, particularly, San Antonio Creek in Los Angeles and San Bernardino counties, Big Bear Lake and Lytle Creek in San Bernardino County, Mill Creek near Redlands and creeks in the Idyllwild territory near Hemet which constitutes the Hemet water supply. Most of these streams are used continually by thousands of individuals of southern California who visit these streams during the summer months.

Set-back restrictions for the purpose of preventing the pollution of these streams are essential if these waters are to remain attractive for recreational purposes and kept safe for public water supplies. The enforcement of such set-back restrictions is going forward.

There are men and classes of men that stand above the common herd; the soldier, the sailor, and the shepherd not infrequently; the artist rarely, rarelier still the clergyman; the physician almost as a rule.—*Robert Louis Stevenson.*

MORBIDITY*

Diphtheria.

46 cases of diphtheria have been reported, as follows: Alameda County 1, Chico 1, Willows 1, Los Angeles County 4, Alhambra 1, Long Beach 2, Los Angeles 13, South Pasadena 1, Pacific Grove 1, La Habra 1, Laguna Beach 1, Placentia 6, Riverside 1, Sacramento 2, San Bernardino County 1, Redlands 2, San Francisco 1, San Joaquin County 1, Palo Alto 1, San Jose 3, Tulare County 1.

Scarlet Fever.

38 cases of scarlet fever have been reported, as follows: Oakland 2, Fresno County 1, Glendale 2, Los Angeles 8, Pasadena 1, Madera County 1, Monterey County 1, Salinas 1, Orange County 1, Sacramento County 1, Hollister 1, San Bernardino County 1, San Diego 2, San Francisco 8, Stockton 1, San Luis Obispo 1, Palo Alto 2, Stanislaus County 1, Ventura County 2.

Smallpox.

17 cases of smallpox have been reported, as follows: Los Angeles County 2, Los Angeles 6, Santa Monica 1, Merced

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* From reports received on July 7th and 8th for week ending July 5th.

County 1, Salinas 1, Sacramento 2, Santa Clara County 1, Stanislaus County 3.

Typhoid Fever.

10 cases of typhoid fever have been reported, as follows: Los Angeles 1, Madera County 1, Sacramento County 1, San Bernardino County 3, San Jose 2, California 2.**

Measles.

665 cases of measles have been reported, as follows: Alameda County 3, Alameda 1, Berkeley 16, Hayward 13, Oakland 14, San Leandro 2, Calaveras County 1, Contra Costa County 3, Fresno 8, Glenn County 1, Los Angeles County 38, Alhambra 3, Beverly Hills 3, Compton 6, Culver City 1, Glendale 5, Glendora 1, Huntington Park 6, La Verne 2, Long Beach 30, Los Angeles 103, Monrovia 4, Pasadena 25, Pomona 1, San Fernando 1, San Gabriel 5, Santa Monica 29, South Pasadena 1, Whittier 15, Lynwood 5, South Gate 24, Maywood 3, Bell 2, Madera County 1, Marin County 1, Yosemite 1, Monterey County 3, Monterey 1, Orange County 1, Anaheim 7, Brea 1, Newport Beach 2, Orange 1, Santa Ana 9, Laguna Beach 1, Riverside County 11, Riverside 15, Sacramento County 8, Sacramento 11, San Bernardino County 2, Ontario 19, Redlands 1, San Bernardino 3, Uplands 22, San Diego County 17, Chula Vista 1, National City 2, San Diego 51, San Francisco 16, San Joaquin County 5, Stockton 11, Tracy 1, San Luis Obispo County 1, Santa Barbara County 12, Santa Clara County 1, Palo Alto 4, San Jose 3, Stanislaus County 1, Tulare County 13, Exeter 1, Ventura County 12, Ventura 5, Ojai 4, Yolo County 8.

Whooping Cough.

141 cases of whooping cough have been reported, as follows: Alameda 11, Albany 1, Berkeley 1, Oakland 9, Fresno County 2, Fresno 4, Los Angeles County 11, Alhambra 1, Compton 3, El Monte 2, Huntington Park 2, Long Beach 3, Los Angeles 27, Pasadena 1, San Gabriel 1, San Marino 3, South Gate 4, Soledad 1, Orange 1, Santa Ana 1, Riverside County 1, Riverside 1, Sacramento 1, San Bernardino County 1, Redlands 1, San Diego County 2, San Diego 7, San Francisco 4, San Joaquin County 10, Tracy 1, San Luis Obispo County 7, Santa Maria 1, San Jose 1, Exeter 1, Lindsay 3, Ventura County 10.

Poliomyelitis.

88 cases of poliomyelitis have been reported, as follows: Los Angeles County 6, Alhambra 2, Burbank 1, Culver City 2, Glendale 2, Long Beach 2, Los Angeles 50, Pasadena 1, San Marino 1, South Gate 1, Maywood 1, Marin County 1, Orange 1, Laguna Beach 1, Riverside 1, San Bernardino County 5, Redlands 2, San Bernardino 2, San Diego 3, Burlingame 1, Sonoma County 1, Tulare County 1.

Epidemic Meningitis.

2 cases of epidemic meningitis have been reported, as follows: Glendale 1, Los Angeles 1.

Rocky Mountain Spotted Fever.

Susanville reported one case of Rocky Mountain spotted fever.

Undulant Fever.

2 cases of undulant fever have been reported, as follows: Tracy 1, Stanislaus County 1.

** Cases charged to "California" represent patients ill before entering the state or those who contracted their illness traveling about the state throughout the incubation period of the disease. These cases are not chargeable to any one locality.

COMMUNICABLE DISEASE REPORTS

Disease	1930				1929			
	Week ending			Reports for week ending July 5 received by July 8	Week ending			Reports for week ending July 6 received by July 9
	June 14	June 21	June 28		June 15	June 22	June 29	
Actinomycosis	0	0	1	0	0	0	0	0
Anthrax	1	0	0	0	0	0	0	0
Chickenpox	274	228	116	106	313	253	243	103
Coccidioidal Granuloma	0	1	0	0	0	1	1	0
Dengue	0	0	0	0	0	0	0	1
Diphtheria	49	46	57	46	45	59	62	37
Dysentery (Amoebic)	1	0	2	1	0	0	3	2
Dysentery (Bacillary)	0	8	13	4	5	0	7	3
Encephalitis (Epidemic)	1	2	0	0	1	2	5	1
Erysipelas	14	10	16	13	10	13	24	4
Food Poisoning	8	23	2	0	3	0	0	0
German Measles	8	11	4	9	14	13	15	5
Gonococcus Infection	119	112	104	121	107	104	94	88
Hookworm	0	0	0	0	1	0	0	0
Influenza	14	18	26	22	19	22	21	9
Jaundice (Epidemic)	0	0	1	2	0	0	0	0
Leprosy	0	0	2	0	0	0	0	0
Malaria	0	0	1	1	2	8	3	0
Measles	1,580	1,285	1,024	665	129	195	104	73
Meningitis (Epidemic)	5	4	5	2	10	12	9	13
Mumps	478	343	240	162	382	273	194	120
Ophthalmia Neonatorum	0	0	0	0	1	0	2	0
Paratyphoid Fever	5	4	1	1	0	0	1	1
Pellagra	5	1	7	2	1	1	2	2
Pneumonia (Lobar)	49	42	78	20	29	49	96	45
Poliomyelitis	46	52	78	88	4	5	5	4
Rabies (Animal)	21	25	24	15	16	8	13	18
Rocky Mt. Spotted Fever	0	0	1	1	0	1	0	0
Scarlet Fever	118	85	68	38	345	283	192	124
Smallpox	38	49	43	17	47	28	18	32
Syphilis	163	146	133	116	227	100	105	209
Tetanus	0	2	1	1	0	1	1	1
Trachoma	0	1	3	0	0	4	0	0
Tuberculosis	209	233	255	164	182	221	169	152
Tularemia	0	0	0	0	0	0	2	1
Typhoid Fever	26	16	23	10	13	16	16	8
Undulant Fever	6	2	2	2	2	0	3	1
Whooping Cough	221	253	161	141	195	179	188	129
Totals	3,459	3,002	2,492	1,770	2,103	1,851	1,598	1,186

BIRTH RATE RISES

During the first three months of 1930, 21,056 births were recorded in California. This represents an increase of 1728, or 9.1 per cent over births recorded during corresponding months of 1929. The birth rate in 1929 was 18.3 per 1000 population, which is a low rate for California. The prospects for a higher birth rate for the year 1930 are promising. The greatest number of births ever recorded in a single year in California was in 1924, when 86,899 births were registered, giving a state birth rate of 22.2 per 1000 population.

Of the 21,056 babies born during the first quarter of this year, 18.2 per cent were Mexicans. The total number of Mexican births during the quarter was 3838, an increase of 542 Mexican births over the corresponding quarter of last year.

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